

APPENDIX A: TEST DATA
Liquid Level Photo

MSL 2450MHz D=150mm



Test Laboratory: Advance Data Technology

W820DI1-11b-CH01-Moed 1

DUT: Wireless 802.11b/g Compact USB Dongle ; Type: WUBR-101 ; Test Frequency: 2412 MHz

Communication System: 802.11b ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK

Medium: MSL2450 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 53$; $\rho = 1000$

kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The bottom side of the EUT to the Phantom)

Antenna type : Dipole Antenna ; Air temp. : 21.6 degrees ; Liquid temp. : 20.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2004/12/20

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17

- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202

- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

Low Channel 1/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.483 mW/g

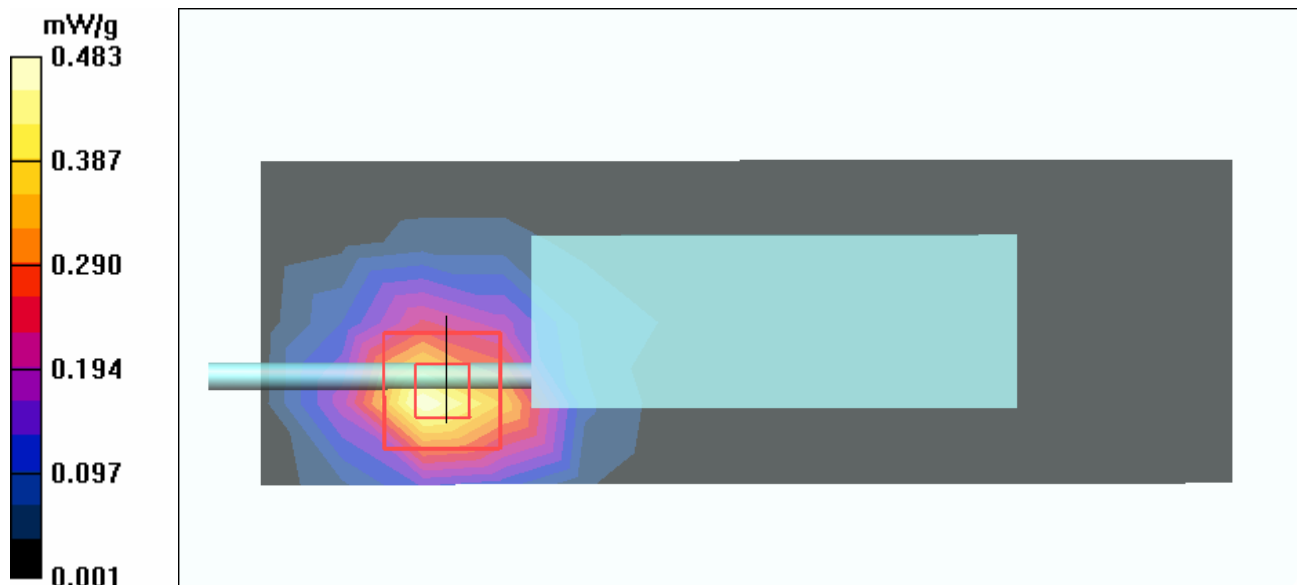
Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.13 V/m

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.469 mW/g; SAR(10 g) = 0.230 mW/g

Maximum value of SAR (measured) = 0.511 mW/g



Test Laboratory: Advance Data Technology

W820DI1-11b-CH06-Moed 1

DUT: Wireless 802.11b/g Compact USB Dongle ; Type: WUBR-101 ; Test Frequency: 2437 MHz

Communication System: 802.11b ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK

Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 52.9$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The bottom side of the EUT to the Phantom)

Antenna type : Dipole Antenna ; Air temp. : 21.6 degrees ; Liquid temp. : 20.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

Mid Channel 6/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.512 mW/g

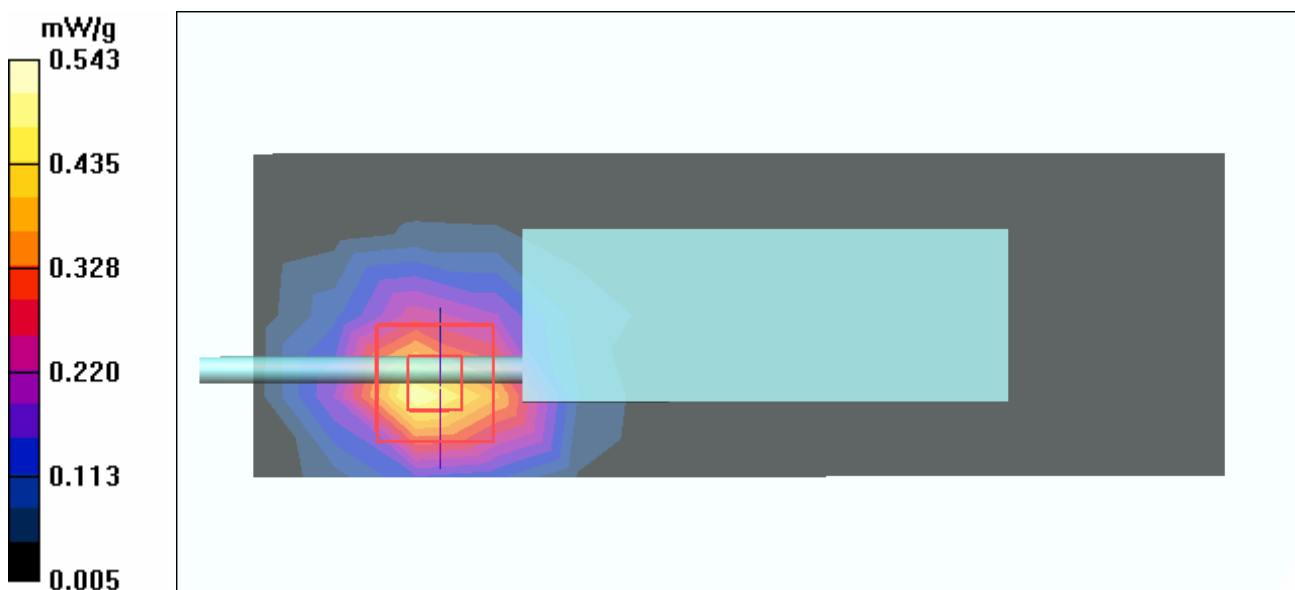
Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.28 V/m

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.499 mW/g; SAR(10 g) = 0.243 mW/g

Maximum value of SAR (measured) = 0.543 mW/g



Test Laboratory: Advance Data Technology

W820DI1-11b-CH11-Moed 1

DUT: Wireless 802.11b/g Compact USB Dongle ; Type: WUBR-101 ; Test Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK

Medium: MSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 2.05$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The bottom side of the EUT to the Phantom)

Antenna type : Dipole Antenna ; Air temp. : 21.6 degrees ; Liquid temp. : 20.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2004/12/20

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17

- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202

- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

High Channel 11/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.655 mW/g

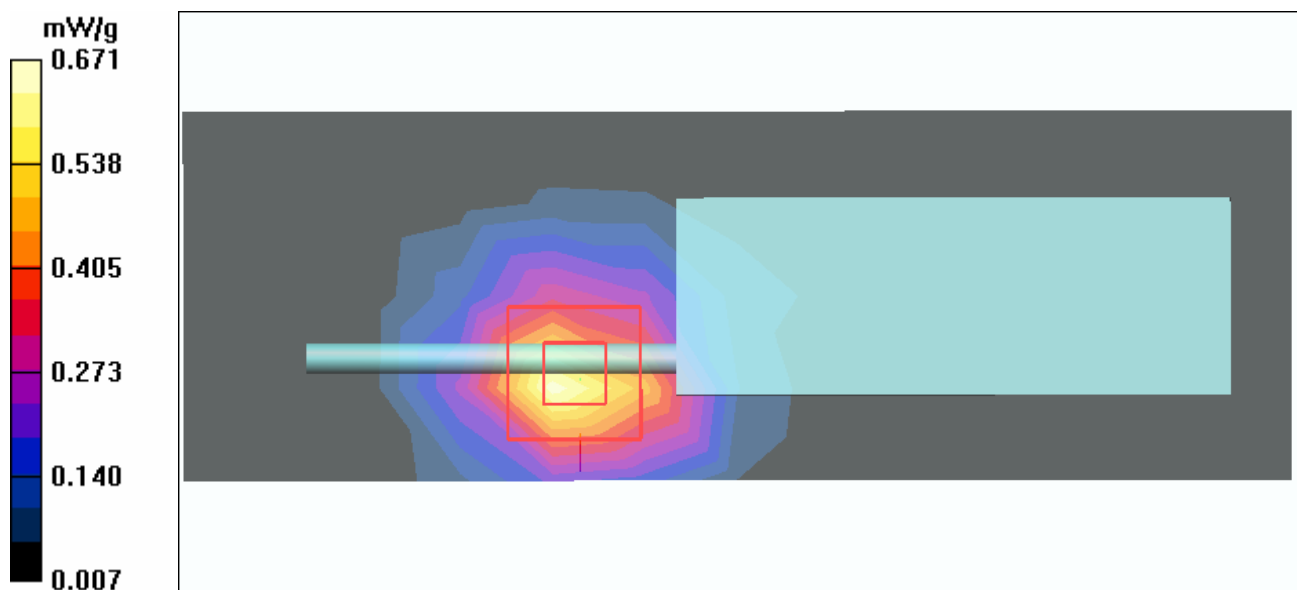
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.79 V/m

Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 0.615 mW/g; SAR(10 g) = 0.299 mW/g

Maximum value of SAR (measured) = 0.671 mW/g



Test Laboratory: Advance Data Technology

W820DI1-11g-CH11-Mode 2

DUT: Wireless 802.11b/g Compact USB Dongle ; Type: WUBR-101 ; Test Frequency: 2462 MHz

Communication System: 802.11g ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK

Medium: MSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 2.05$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The bottom side of the EUT to the Phantom)

Antenna type : Dipole Antenna ; Air temp. : 21.6 degrees ; Liquid temp. : 20.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2004/12/20

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17

- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202

- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

High Channel 11/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.130 mW/g

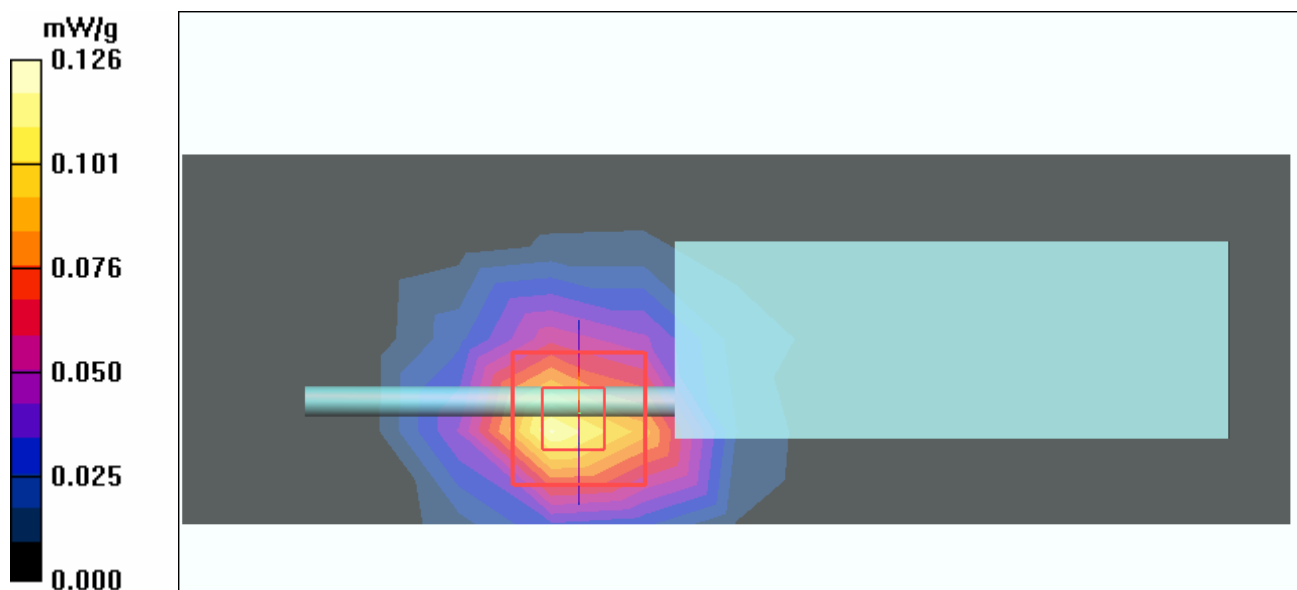
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.05 V/m

Peak SAR (extrapolated) = 0.278 W/kg

SAR(1 g) = 0.115 mW/g; SAR(10 g) = 0.059 mW/g

Maximum value of SAR (measured) = 0.126 mW/g



Test Laboratory: Advance Data Technology

C600-11b-CH01-Mode 3

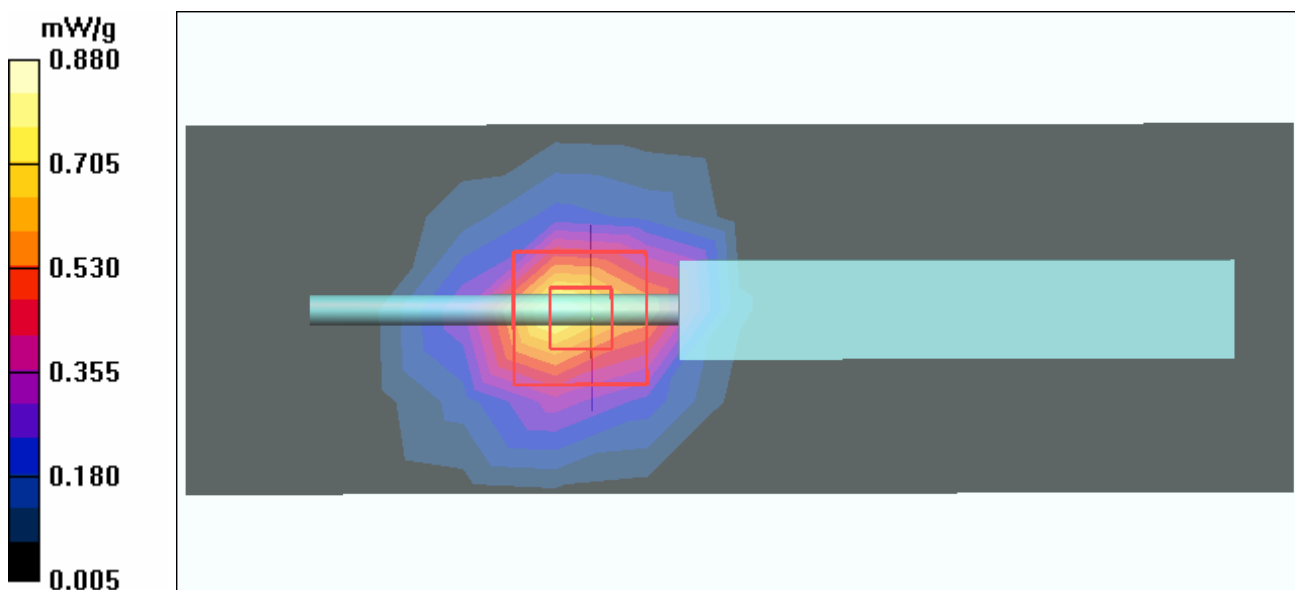
DUT: Wireless 802.11b/g Compact USB Dongle ; Type: WUBR-101 ; Test Frequency: 2412 MHz
 Communication System: 802.11b ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK
 Medium: MSL2450 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 53$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 8 mm (The edge side of the EUT to the Phantom)
 Antenna type : Dipole Antenna ; Air temp. : 21.6 degrees ; Liquid temp. : 20.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

Low Channel 1/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.840 mW/g

Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 14.5 V/m
 Peak SAR (extrapolated) = 1.80 W/kg
SAR(1 g) = 0.805 mW/g; SAR(10 g) = 0.381 mW/g
 Maximum value of SAR (measured) = 0.880 mW/g



Test Laboratory: Advance Data Technology

C600-11b-CH06-Mode 3

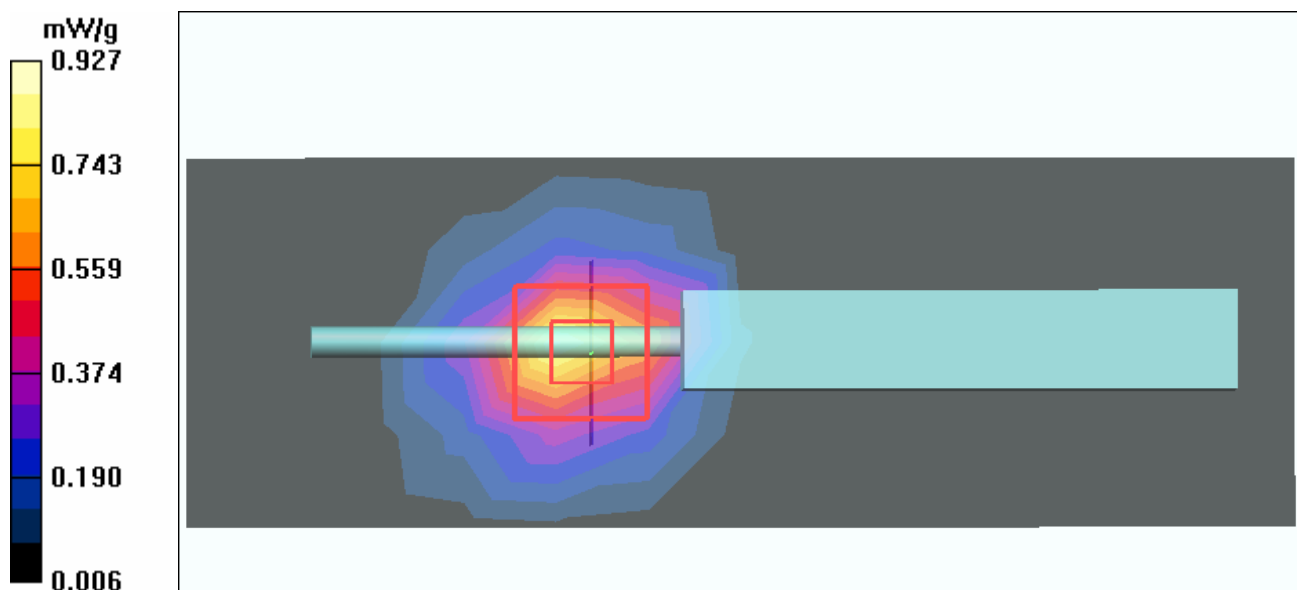
DUT: Wireless 802.11b/g Compact USB Dongle ; Type: WUBR-101 ; Test Frequency: 2437 MHz
Communication System: 802.11b ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK
Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 52.9$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm
Phantom section: Flat Section ; Separation distance : 8 mm (The edge side of the EUT to the Phantom)
Antenna type : Dipole Antenna ; Air temp. : 21.6 degrees ; Liquid temp. : 20.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

Mid Channel 6/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.882 mW/g

Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.9 V/m
Peak SAR (extrapolated) = 1.92 W/kg
SAR(1 g) = 0.842 mW/g; SAR(10 g) = 0.396 mW/g
Maximum value of SAR (measured) = 0.927 mW/g



Test Laboratory: Advance Data Technology

C600-11b-CH11-Mode 3

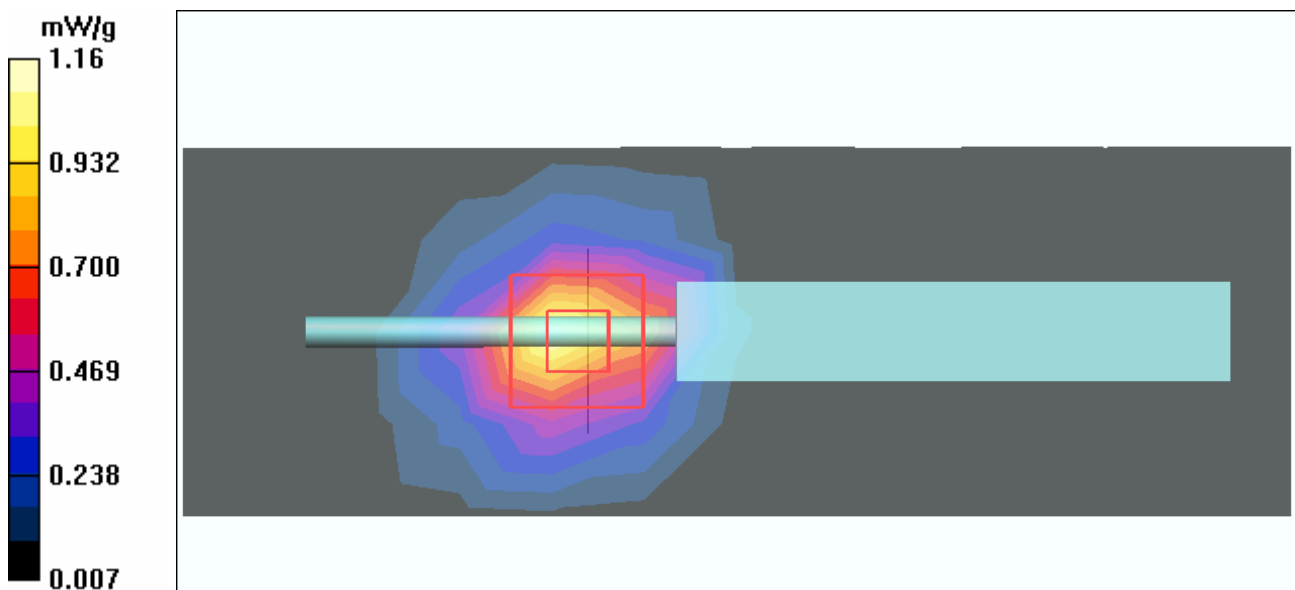
DUT: Wireless 802.11b/g Compact USB Dongle ; Type: WUBR-101 ; Test Frequency: 2462 MHz
 Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK
 Medium: MSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 2.05$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 8 mm (The edge side of the EUT to the Phantom)
 Antenna type : Dipole Antenna ; Air temp. : 21.6 degrees ; Liquid temp. : 20.8 degrees

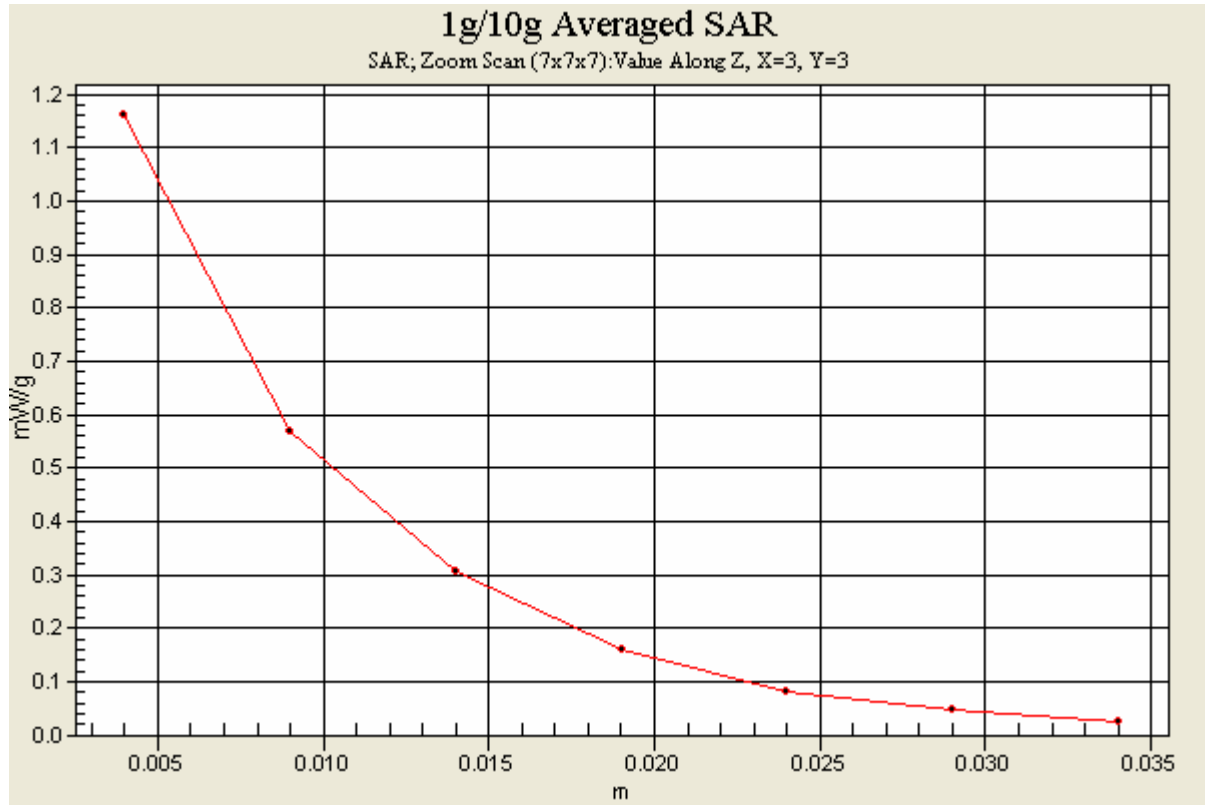
DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

High Channel 11/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 1.15 mW/g

High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 16.9 V/m
 Peak SAR (extrapolated) = 2.41 W/kg
SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.502 mW/g
 Maximum value of SAR (measured) = 1.16 mW/g





Test Laboratory: Advance Data Technology

C600-11g-CH11-Mode 4

DUT: Wireless 802.11b/g Compact USB Dongle ; Type: WUBR-101 ; Test Frequency: 2462 MHz
 Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK
 Medium: MSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 2.05$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 8 mm (The edge side of the EUT to the Phantom)
 Antenna type : Dipole Antenna ; Air temp. : 21.6 degrees ; Liquid temp. : 20.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

High Channel 11/Area Scan (5x13x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.172 mW/g

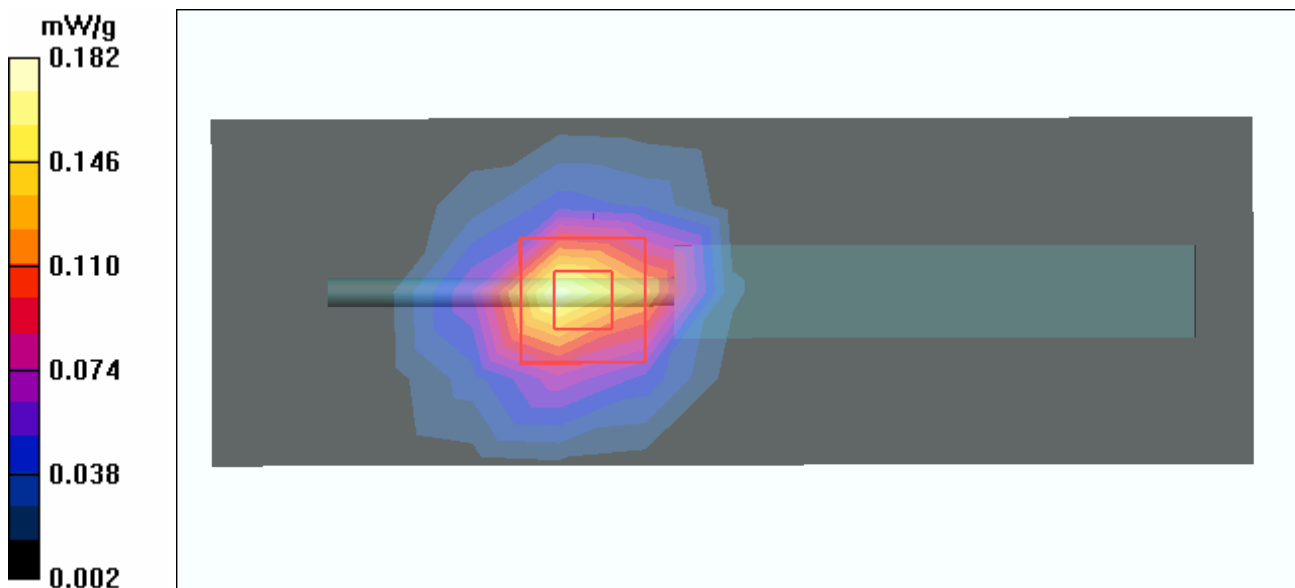
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.43 V/m

Peak SAR (extrapolated) = 0.366 W/kg

SAR(1 g) = 0.168 mW/g; SAR(10 g) = 0.082 mW/g

Maximum value of SAR (measured) = 0.182 mW/g



Test Laboratory: Advance Data Technology

System Validation Check-MSL 2450MHz

DUT: Dipole 2450 MHz ; Type: D2450V2 ; Serial: 716 ; Test Frequency: 2450 MHz

Communication System: CW ; Frequency: 2450 MHz; Duty Cycle: 1:1; Modulation type: CW
 Medium: MSL2450; Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 52.9$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom) Air temp. : 21.6 degrees ; Liquid temp. : 20.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2005/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

d=10mm, Pin=250mW/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 13.8 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.8 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 28.2 W/kg

SAR(1 g) = 12.6 mW/g; SAR(10 g) = 5.76 mW/g

Maximum value of SAR (measured) = 14.1 mW/g

